

Framework for successful implementation of community-based breeding programs in small ruminants in Ethiopia

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Background

Conventional breeding programs involving either nucleus schemes and/or importation of exotic germplasm for crossbreeding were not successful in most sub-Saharan Africa countries. Community-based breeding programs (CBBPs) are suggested as alternatives for genetic improvement of small ruminants. CBBP involves the various actors from the initial phase of design up until implementation of the programs. Livestock keepers' views are considered at each stage of the program design and implementation unlike the often-top down government run schemes.



Basic components of CBBP



Success depends on the following:

- 1) identification of the right beneficiary following a clear guideline
- 2) framework for dissemination of improved genetics and up/ out scaling strategy
- 3) institutional arrangements including establishment of breeders' cooperatives to support functionality and sustainability of the programs
- 4) capacity development of the different actors on general animal husbandry, breeding practices, estimation of breeding values and financial management
- 5) an offline mobile application for data collection and management
- 6) support for long periods with committed technical staff mainly in data management, analysis and feedback of estimated breeding values
- 7) complementary services including disease prevention and control, proper feeding, and market linkages
- 8) a system for certification of improved rams/bucks by an authorized body to ensure quality control
- 9) evaluation of the program and assessment of impact of the scheme.

Conclusions

The framework for setting up CBBPs we developed, which integrates elements for success, has resulted in successful and sustainable breeding programs in Ethiopia.

Major outcomes/ impact of CBBP in Ethiopia

- In Ethiopia, more than 5000 households in 50 villages directly benefiting; 45 functional breeders cooperatives
- Increased productivity (more births, better growth (Annual genetic progress 0.2 kg/year for 6 months weight) and reduced mortality)
- Increased income (average of 20%) from CBBP in Bonga, Horro and Menz CBBPs
- Increased mutton consumption (average of 3 vs 1) in Bonga, Horro, Menz CBBPs
- CBBP is strategy of choice for small ruminants in Ethiopia
- CBBP upscaled in 8 Africa countries

